TABLE OF CONTENTS

Part I: FOUNDATIONS OF CLINICAL RESEARCH

- 1. Frameworks for Generating and Applying Evidence
- 2. On the Road to Translational Research
- 3. Defining the Research Question
- 4. The Role of Theory in Research and Practice
- 5. Understanding Evidence-Based Practice
- 6. Searching the Literature
- 7. Ethical Issues in Clinical Research

Part II: CONCEPTS OF MEASUREMENT

- 8. Principles of Measurement
- 9. Concepts of Measurement Reliability
- 10. Concepts of Measurement Validity
- 11. Designing Surveys and Questionnaires
- 12. Understanding Health Measurement Scales

Part III: DESIGNING CLINICAL RESEARCH

- 13. Choosing a Sample
- 14. Principles of Clinical Trials
- 15. Design Validity
- 16. Experimental Designs
- 17. Quasi-Experimental Designs
- 18. Single Subject Designs
- 19. Exploratory Research: Observational Designs
- 20. Descriptive Research
- 21. Qualitative Research

Part IV: ANALYZING DATA

- 22. Descriptive Statistics
- 23. Foundations of Statistical Inference
- 24. Comparing Two Means: The t-test
- 25. Comparing More Than Two Means: Analysis of Variance
- 26. Multiple Comparison Tests
- 27. Nonparametric Tests for Group Comparisons
- 28. Measuring Association for Categorical Variables: Chi-Square
- 29. Correlation
- 30. Regression
- 31. Multivariate Analysis
- 32. Measurement Revisited: Reliability and Validity Statistics
- 33. Diagnostic and Screening Procedures
- 34. Epidemiology: Measuring Risk

Part V: Putting It All Together

35. Writing a Research Proposal

36. Critical Appraisal: Evaluating Research Reports

- 37. Synthesizing Literature: Systematic Reviews and Meta-Analyses
- 38. Disseminating Research

Appendices

- A. Statistical Tables
- B. Relating the Research Question to the Choice of Statistical Test
- C. Data Management

Glossary Index